

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1.-94. (Cancelled)

95. (Currently amended) A device that comprises a substrate comprising a surface that is coated with a crosslinked hydrogel polymer blend composition, wherein the composition comprises:

(i) [a first photo-crosslinked polymer, wherein photo-crosslinking results from reacting benzophenone groups on the first polymer] a plurality of first polysaccharide polymer molecules, and

(ii) a plurality of second polysaccharide polymer molecules, wherein the second polymer molecules are [that is] different from the first polysaccharide polymer molecules and [that comprises] comprise a selective binding functionality, and

wherein (a) the first polysaccharide polymer[is photo-crosslinked] molecules are photocrosslinked with [itself] each other and further [photo-crosslinked] photocrosslinked with the second polysaccharide polymer molecules through reacted benzophenone groups, wherein photocrosslinking results from photo-reacting benzophenone groups attached to the first polysaccharide polymer molecules, and

(b) [the first and second polymers comprise a polysaccharide, and (c)] wherein the device is a probe for a mass spectrometer.

96.-98. (Cancelled)

99. (Currently amended) The device according to claim 95, wherein the first and second polysaccharide polymer molecules comprise [is] dextran.

100.-108. (Cancelled)

109. (Previously presented) The device according to claim 95, wherein the selective binding functionality is selected the group consisting of a positively charged moiety, a negatively charged moiety, an anion exchange moiety, a cation exchange moiety, a metal ion complexing moiety, a metal complex, a polar moiety and a hydrophobic moiety.

110. (Previously presented) The device according to claim 95, wherein the selective binding functionality is a biospecific binding functionality.

111. (Previously presented) The device according to claim 110, wherein the biospecific binding functionality is selected from the group consisting of antibodies, receptor proteins and nucleic acids.

112. (Previously presented) The device according to claim 95, wherein the selective binding functionality comprises a group for covalently binding a molecule.

113. (Previously presented) The device according to claim 112, wherein the selective binding functionality is an epoxide or a carbodiimidazole.

114. (Previously presented) The device according to claim 95, wherein the selective binding functionality is bound to an analyte selected from the group consisting of polypeptides, nucleic acids, carbohydrates and lipids.

115. (Cancelled)

116. (Currently amended) The device according to claim [116] 95, wherein the hydrogel polymer blend composition is covalently bound to the surface.

117. (Previously presented) The device according to claim 95, wherein the hydrogel polymer blend composition is physically attached to the surface.

118. (Previously presented) The device according to claim 95, wherein the hydrogel polymer blend composition is a film having a film thickness of about one micron to about 10 microns.

119. (Currently amended) The device according to claim 95, wherein the substrate comprises [aluminum] plastic.

120. (Previously presented) The device according to claim 95, wherein the substrate comprises a primer layer that comprises a silane, a hydrocarbon silane, a fluorinated silane, a mixed fluorinated/hydrocarbon silane, a polymer, an alkoxy silane, a chlorosilane, an alkanethiol or a disulfide.

121. (Previously presented) The device according to claim 95, wherein the substrate comprises plastic, glass, silicon, metal, or metal oxide.

122. (Previously presented) The device according to claim 95, wherein the hydrogel is a uniform layer on the surface.

123. (Previously presented) The device according to claim 95, wherein the hydrogel is in the form of discrete spots on the surface.

124. (Cancelled)

125. (Previously presented) The device according to claim 95, wherein the hydrogel polymer blend composition further comprises an energy absorbing moiety.

126. (Newly added) The device according to any of claims 95, 99, 109-114 and 116-123, wherein a matrix for laser desorption/ionization mass spectrometry is applied to the crosslinked hydrogel polymer blend composition.

127. (Newly added) The device according to claim 126, wherein the first polysaccharide molecules are further photocrosslinked with the surface of the substrate through reacted benzophenone groups.

128. (Newly added) The device according to claims 95, 99, 109-114 and 116-123, 125, wherein the first polysaccharide molecules are further photocrosslinked with the surface of the substrate through reacted benzophenone groups.